



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,429	03/25/2004	Shyh-Kwei Chen	YOR920040052US1	6945
48150	7590	12/29/2008	EXAMINER	
MCGINN INTELLECTUAL PROPERTY LAW GROUP, PLLC			JOHNSON, JOHNESE T	
8321 OLD COURTHOUSE ROAD			ART UNIT	PAPER NUMBER
SUITE 200			2166	
VIENNA, VA 22182-3817			MAIL DATE	DELIVERY MODE
			12/29/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/808,429	<b>Applicant(s)</b> CHEN ET AL.
	<b>Examiner</b> Johnese Johnson	<b>Art Unit</b> 2166

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 29 August 2008.

2a) This action is FINAL.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1 and 3-40 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1 and 3-40 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/DS/06)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_

5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

## DETAILED ACTION

### **Remarks**

1. In response to the Amendment filed on August 29, 2008, claims 1 and 3-40 are pending.
  
2. The rejection under 35 USC 101 to claims 13-20 are maintained. See detailed explanation below.

### ***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 13-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

Descriptive material can be characterized as either “functional descriptive material” or “nonfunctional descriptive material.” Both types of “descriptive material” are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)

Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because “[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.”).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burke et al. (US Pat. No. 6,789,252), in view of Sheard et al. (US Pat. No. 6,208,345), and further in view of Kompella (US PG Pub. No. 7,350,191).

As to claim 1, Burke et al. disclose:

determining an object definition for an object based upon a collaboration code (see col. 19, lines 22-24); and

Storing said business object definition (see col. 25, lines 23-25).

However, Burke et al. does not explicitly disclose:

receiving an object and a collaboration code

Sheard et al. Discloses:

receiving an object (see col. 31, line 31) and a collaboration code (see col. 14, lines 28-31).

It would have been obvious to have modified the teachings of Burke et al. by the teachings of Sheard et al. to provide an improved data integration system and methodology capable of effectively integrating data produced by applications of varying technologies (see Sheard et al. col. 2, lines 65-67 and col. 3, line 1).

However the combination of Burke et al. and Sheard et al. does not explicitly disclose:

wherein said collaboration code determines said business object definition for said object without pre-defined business object definitions, if the object does not conform to a known business object definition.

Kompella does disclose:

wherein said collaboration code determines said business object definition for said object without pre-defined business object definitions, if the object does not conform to a known business object definition (see cols. 31-32, lines 65-67 and 1-21).

It would have been obvious to have modified the teachings of Burke et al. and Sheard et al. by the teachings of Kompella to provide a system and method for the generation of data access applications, because previous methods were too costly and too time consuming (see Kompella col. 1, 31-34 and 41-44).

As to claim 3, Burke et al., as modified, discloses:

wherein said object comprises a business object (see Burke et al. col. 34, lines 26-28 and 37-42).

As to claim 4, Burke et al., as modified, discloses:

forwarding said object and said object definition (see Burke et al. col. 34, lines 45-48).

As to claim 5, Burke et al., as modified, discloses:

wherein said forwarding comprises forwarding said object and said object definition to an application adapter (see Burke et al. col. 34, lines 26-28 and 37-42 and col. 42, lines 64-66).

As to claim 6, Burke et al., as modified, discloses:

processing said object based upon said object definition in said application adapter (see Burke et al., col. 6, lines 20-21).

As to claim 7, Burke et al., as modified, discloses:

wherein said collaboration code determines how data from a second object is mapped to said object (see Burke et al., col. 21, lines 1-8).

As to claim 8, Burke et al., as modified, discloses:

wherein said collaboration code determines how said object is derived from said second object (see Burke et al., col. 21, lines 1-5).

As to claim 9, Burke et al., as modified, discloses:

wherein said collaboration code determines how said object is derived from said second object and a second object definition (see Burke et al., col. 21, lines 1-5).

As to claim 10, Burke et al., as modified, discloses:

further comprising receiving said second object definition (see Burke et al., col. 34, lines 26-28 and 37-42 and Burke et al., col. 21, line 3 – second object).

As to claim 11, Burke et al., as modified, discloses:

wherein said determining comprises determining said object definition for said object based upon said collaboration code and said second object definition (see Burke et al. col. 17, lines 48-49 and Burke et al. col. 21, line 3 – second object).

As to claim 12, Burke et al., as modified, discloses:

wherein said receiving comprises receiving said object and said collaboration code from a broker (see Burke et al. col. 34, lines 26-28 and 37-42; wherein the means allows data to be exchanged/integrated in different formats).

As to claim 13, Burke et al. discloses:

means for determining an object definition for said object based upon said collaboration code (see col. 17, lines 48-49 and col. 20, lines 10-11).

However, Burke et al. does not explicitly disclose:

means for receiving an object and a collaboration code.

Sheard et al. disclose:

means for receiving an object (see col. 31, line 31) and a collaboration code (see col. 14, lines 28-31).

It would have been obvious to have modified the teachings of Burke et al. by the teachings of Sheard et al. to provide an improved data integration system and methodology capable of effectively integrating data produced by applications of varying technologies (see Sheard et al. col. 2, lines 65-67 and col. 3, line 1).

However the combination of Burke et al. and Sheard et al. does not explicitly disclose:

wherein said collaboration code determines said business object definition for said object without pre-defined business object definitions.

Kompella does disclose:

wherein said collaboration code determines said business object definition for said object without pre-defined business object definitions, if the object does not conform to a known business object definition (see cols. 31-32, lines 65-67 and 1-21).

It would have been obvious to have modified the teachings of Burke et al. and Sheard et al. by the teachings of Kompella to provide a system and method for the generation of data access applications, because previous methods were too costly and too time consuming (see Kompella col. 1, 31-34 and 41-44).

As to claim 14, Burke et al., as modified, discloses:

wherein said object comprises a business object (see Burke et al. col. 34, lines 26-28 and lines 37-42).

As to claim 15, Burke et al., as modified, discloses:

means for forwarding said object and said object definition to an application adapter (see Burke et al. col. 34, lines 26-28 and lines 37-42 and Burke et al. col. 42, lines 64-66).

As to claim 16, Burke et al., as modified, discloses:

wherein said collaboration code determines how data from a second object is mapped to said object (see Burke et al. col. 21, lines 1-8).

As to claim 17, Burke et al., as modified, discloses:

means for receiving a second object definition, wherein said collaboration code determines how said object is derived from said second object and said second object definition (see Burke et al. col. 21, lines 1-5).

As to claim 18, Burke et al., as modified, discloses:

wherein said means for determining comprises means for determining said object definition for said object based upon said collaboration code and said second object definition (see Burke et al. col. 17, lines 48-49 and Burke et al. col. 21, line 3 – second object).

As to claim 19, Burke et al., as modified, discloses:

wherein said means for receiving comprises means for receiving said object and said collaboration code from a broker (see Burke et al. col. 34, lines 26-28 and 37-42; wherein the means allows data to be exchanged/ integrated in different formats).

As to claim 20, Burke et al., disclose:

determines a first object definition based upon said collaboration code (see col. 19, lines 22-24).

However, Burke et al. do not explicitly disclose:

a reverse object discovery agent that receives a first object and a collaboration code from a broker.

Sheard et al. disclose:

Art Unit: 2166

a reverse object discovery agent that receives a first object (see col. 31, line 31) and a collaboration code (see col. 14, lines 28-31).

It would have been obvious to have modified the teachings of Burke et al. by the teachings of Sheard et al. to provide an improved data integration system and methodology capable of effectively integrating data produced by applications of varying technologies (see Sheard et al. col. 2, lines 65-67 and col. 3, line 1). However the combination of Burke et al. and Sheard et al. does not explicitly disclose: wherein said collaboration code determines said business object definition for said object without pre-defined business object definitions.

Kompella does disclose:

wherein said collaboration code determines said business object definition for said object without pre-defined business object definitions, if the object does not conform to a known business object definition (see cols. 31-32, lines 65-67 and 1-21).

It would have been obvious to have modified the teachings of Burke et al. and Sheard et al. by the teachings of Kompella to provide a system and method for the generation of data access applications, because previous methods were too costly and too time consuming (see Kompella col. 1, 31-34 and 41-44).

As to claim 21, Burke et al., as modified, discloses:

a broker that receives a second object and a second object definition and that generates said first object using said collaboration code (see Burke et al. col. 34, lines 26-28 and 37-42 and col. 20, lines 21-23).

As to claim 22, Burke et al., as modified, discloses:

wherein said collaboration code determines how said first object is derived from said second object (see Burke et al., col. 21, lines 1-5).

As to claim 23, Burke et al., as modified, discloses:

wherein said collaboration code determines how said first object is derived from second object and said second object definition (see Burke et al., col. 21, lines 1-5).

As to claim 24, Burke et al., as modified, discloses:

an application adapter that receives said first object and said first object definition from said reverse object discovery agent (see Burke et al., col. 34, lines 26-28 and lines 37-42 and col. 42, lines 64-66).

As to claim 25, Burke et al., as modified, discloses:

determining whether an object conforms to a known object definition (see col. 21, lines 12-15);  
and

Storing said business object definition (see col. 25, lines 23-25).

However, Burke et al. does not explicitly disclose:

requesting a collaboration code and an input object definition if said object does not conform to a known object definition; and

receiving an object and a collaboration code

Art Unit: 2166

Sheard et al. Discloses:

requesting a collaboration code (see col. 14, lines 28-31 ) and an input object definition if said object does not conform to a known object definition (see col. 31, line 31).

receiving an object (see col. 31, line 31) and a collaboration code (see col. 14, lines 28-31).

It would have been obvious to have modified the teachings of Burke et al. by the teachings of Sheard et al. to provide an improved data integration system and methodology capable of effectively integrating data produced by applications of varying technologies (see Sheard et al. col. 2, lines 65-67 and col. 3, line 1). However the combination of Burke et al. and Sheard et al. does not explicitly disclose: wherein said collaboration code determines said business object definition for said object without pre-defined business object definitions.

Kompella does disclose:

wherein said collaboration code determines said business object definition for said object without pre-defined business object definitions, if the object does not conform to a known business object definition (see cols. 31-32, lines 65-67 and 1-21).

It would have been obvious to have modified the teachings of Burke et al. and Sheard et al. by the teachings of Kompella to provide a system and method for the generation of data access applications, because previous methods were too costly and too time consuming (see Kompella col. 1, 31-34 and 41-44).

As to claim 26, Burke et al., as modified, discloses:

Art Unit: 2166

analyzing said collaboration code and said input object definition (see Burke et al. col. 21, lines 1-8).

As to claim 27, Burke et al., as modified, discloses:

creating a new object definition based upon the results of said analyzing (see Burke et al. col. 20, lines 21-23).

As to claim 28, Burke et al., as modified, discloses:

forwarding said object if said object conforms to a known object definition (see Burke et al. col. 34, lines 45-48).

As to claim 29 Burke et al., as modified, discloses:

wherein said object comprises a business object (see Burke et al. col. 34, lines 26-28 and lines 37-42).

As to claim 30, Burke et al., as modified, discloses:

forwarding said new object definition to an application adapter (see Burke et al. col. 34, lines 26-28 and lines 37-42 and Burke et al. col. 42, lines 64-66).

As to claim 31, Burke et al., as modified, discloses:

receiving a subscription from said application adapter for said new object definition (see Burke et al. col. 50, lines 61-63; wherein the notification subscriptions are received and configured).

As to claim 32, Burke et al., as modified, discloses:

forwarding said object in response to said subscription (see Burke et al. col. 34, lines 45-48 and col. 50, lines 58-63).

As to claim 33, Burke et al., disclose:

instructions for determining a business object definition for said object based upon said collaboration code (see Burke et al. col. 15, line 53 and col. 17, lines 48-49).

Instructions for storing said business object definition (see Burke et al. col. 15, line 53 and col. 17, lines 48-49).

However, Burke et al. does not explicitly disclose:

instructions for receiving an object and a collaboration code

Sheard et al. Discloses:

instructions for receiving an object and a collaboration code (see Sheard et al. col. 12, lines 28-29).

It would have been obvious to have modified the teachings of Burke et al. by the teachings of Sheard et al. to provide an improved data integration system and methodology capable of effectively integrating data produced by applications of varying technologies (see Sheard et al. col. 2, lines 65-67 and col. 3, line 1).

However the combination of Burke et al. and Sheard et al. does not explicitly disclose:

wherein said collaboration code determines said business object definition for said object without pre-defined business object definitions.

Kompella does disclose:

wherein said collaboration code determines said business object definition for said object without pre-defined business object definitions, if the object does not conform to a known business object definition (see cols. 31-32, lines 65-67 and 1-21).

It would have been obvious to have modified the teachings of Burke et al. and Sheard et al. by the teachings of Kompella to provide a system and method for the generation of data access applications, because previous methods were too costly and too time consuming (see Kompella col. 1, 31-34 and 41-44).

As to claim 34, Burke et al., as modified, discloses:

wherein said object comprises a business object (see Burke et al. col. 34, lines 26-28 and lines 37-42).

As to claim 35, Burke et al., as modified, discloses:

instructions for forwarding said new object definition to an application adapter(see Burke et al. col. 34, lines 26-28 and lines 37-42 and Burke et al. col. 42, lines 64-66).

As to claim 36, Burke et al., as modified, discloses:

instructions for receiving a subscription from said application adapter for said new object definition (see Burke et al. col. 15, line 53 and col. 50, lines 61-63; wherein the notification subscriptions are received and configured).

Art Unit: 2166

As to claim 37, Burke et al., as modified, discloses:

instructions for forwarding said object in response to said subscription (see Burke et al., col. 15, line 53, col. 34, lines 45-48 and col. 50, lines 58-63).

As to claim 38, Burke et al., as modified, discloses:

Wherein said collaboration code comprise dynamically generated business object newly discovered during runtime (see Kompella see cols. 36-47).

As to claim 39, Burke et al., as modified, discloses:

wherein the means for receiving the object and the object and the collaboration code, the means for determining whether the object conforms to the known business object definition, and the means for determining the object definition for said object based on said collaboration code comprise a reverse object discovery agent means (see Kompella, cols. 31-32, lines 65-67 and 1-21).

As to claim 40, Burke et al., as modified, discloses:

determining a mapping information by determining how a plurality of business objects was merged to create the received object (see Burke et al., col. 21, lines 1-8); creating the business object definition based on the determined mapping information (see Burke et al., col. 17, lines 48-49 and Burke et al., col. 21, line 3) and (see Burke et al., col. 21, lines 1-8); sending the created business object definition to an adapter (see Burke et al., col. 34, lines 26-28 and 37-42 and col. 42, lines 64-66); and subscribing to the new business object definition (see

col. 11 lines 3-5; delivering the query definition (mapping) and connection information to the requesting application such as the WebQuery tool 102).

*Response to Arguments*

7. Applicant's arguments filed 8-29-2008 have been fully considered but they are not persuasive.

Applicant's arguments that neither Burke, Sheard, nor Kompella disclose, "wherein said collaboration code determines said business object definition for said object without pre-defined business object definitions, if the object does not conform to a known business object definition" is acknowledged but is not deemed persuasive.

Based on the examiner's interpretation, Kompella does disclose "wherein said collaboration code determines said business object definition for said object without pre-defined business object definitions, if the object does not conform to a known business object definition" at (see cols. 31-32, lines 59 and 1-21). The examiner already cited Burke for disclosing determining an object definition for an object based upon a collaboration (see claim 1 rejection). Kompella takes it a step further by adding new data object definitions: In step 264, the upgrade protection process compares the horizontal partitioning of the previous and new data object definitions. In step 266, the upgrade protection process compares the list of columns of each data object in the new run against the list of columns of the corresponding data objects in the previous run.

(166) FIG. 11C illustrates the missing data object step 256 and its sub-steps in accordance with the invention. In particular, in step 268, the upgrade protection process, instead of duplicating data objects in the new run to match the names of data objects in a previous run, renames the

Art Unit: 2166

data objects in the new run to match their names in a previous run when it can be determined they are the same data objects by their relationship to the source application screens from which they originated, and the metadata descriptions of the records returned by the data objects. In step 270, the upgrade protection process may determine the best compatible but differently named metadata definition of the data objects by: 1) quantifying the number of columns that are named the same; 2) quantifying the number of columns that are named differently but have the same contents; 3) quantifying the number of columns that are missing from the new run but existed in the previous run; and 4) recording the measure of compatibility for each candidate metadata definition in the new run. In step 272, the handling step of the upgrade protection process may optionally permit the user of the system to modify the decisions made about which metadata definitions of data objects to rename or copy to maintain a consistent interface to the data objects (see cols. 31-32, lines 59 and 1-21).

#### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johnese Johnson whose telephone number is 571-270-1097. The examiner can normally be reached on 4/5/9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. J./  
Examiner, Art Unit 2166

December 15, 2008  
JJ

/Hosain T Alam/

Supervisory Patent Examiner, Art Unit 2166